

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:  
calculating chroma  $C$ , using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version); and  
calculating whiteness  $W$  from the chroma  $C$  using an equation (1),  
$$W = aC + b \dots (1)$$
where the coefficient  $a$  is a negative real number and the coefficient  $b$  is a positive real number.
2. (Currently Amended) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:  
calculating chroma  $C$ , using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version); and  
calculating whiteness  $W$  from the chroma  $C$  using an equation (1),

$$\cancel{W = aC + 100}$$

$$\underline{W = aC + b \dots (1)}$$

wherein where the coefficient  $a$  is a negative real number, the coefficient  $b$  is a positive real number, and the whiteness  $W$  is 100 when the chroma  $C$  is 0.

3. (Currently Amended) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:  
calculating chroma  $C$ , using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version); and  
calculating whiteness  $W$  from the chroma  $C$  using an equation (1),

$$\cancel{W = aC + 100}$$

$$\underline{W = aC + b \dots (1)}$$

wherein where the coefficient  $a$  is a negative real number, the coefficient  $b$  is a positive real number, the whiteness  $W$  is 100 when the chroma  $C$  is 0, and the whiteness  $W$  is 50 under a standard illuminant  $A$ .

4. (Original) The method of Claim 1,  
wherein the chroma  $C$  is a chroma of the light emitted from the light source, and  
the coefficient  $a$  is -5.3 and the coefficient  $b$  is 100.

5. (Original) The method of Claim 1,  
wherein the chroma  $C$  is a chroma of light obtained when the light from the light source is reflected off from a surface of an object whose Munsell value and Munsell chroma is 9.5 and 0, respectively, and  
the coefficient  $a$  is -4.4 and the coefficient  $b$  is 100.

6. (Original) The method of Claim 1,  
wherein the chroma is a chroma of light obtained when the light emitted from the light source is reflected off a blank surface of a newspaper, and  
the coefficient  $a$  is -3.3 and the coefficient  $b$  is 100.

7. (Original) A method of evaluating comparative whiteness of light emitted from two light sources, comprising the steps of:

calculating chroma  $C1$  of light from a first light source and chroma  $C2$  of light from a second light source using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version); and

calculating comparative whiteness  $Wc$  from the chroma  $C1$  and the chroma  $C2$ , using an equation (2),

$$Wc = (C1 - C2) / C1 \dots (2).$$

8-83. (Cancelled)

84. (Original) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:

calculating chroma  $C$  of a first light source, using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version); and

calculating whiteness  $W$  from the chroma  $C$  using an equation (1),

$$W = aC + b \dots (1)$$

where the coefficient  $a$  is a negative real number and the coefficient  $b$  is a positive real number, and  $a$  and  $b$  are determined using equation (1), selected values for  $W$ , and the chroma value of second light source that is not the first light source.

85. (New) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:

calculating chroma value  $C1$  of a first light source, and chroma value  $C2$  of a second light source;

using selected whiteness values  $W$  and the calculated chroma value  $C1$  to determine the coefficients  $a$  and  $b$  of an equation (1),

$$W = aC1 + b \dots (1);$$

calculating a whiteness value  $W2$  for the second light source using the calculated chroma value  $C2$ , the determined coefficients  $a$  and  $b$ , and equation (2),

$$W2 = aC2 + b \dots (2).$$

86. (New) The method of claim 85 wherein both  $C1$  and  $C2$  are determined using light reflected from a surface, with the same surface being used to reflect light used to determine both  $C1$  and  $C2$ .

87. (New) The method of claim 86 wherein at least one of the chroma values  $C1$  and  $C2$  are calculated using a method defined by the CIE 1997 Interim Color Appearance Model (Simple Version).

88. (New) The method of claim 87 wherein at least one of the chroma values is at least partially based on measured spectral data.

89. (New) The method of claim 88 wherein the spectral data is measured using a spectrophotometer.

90. (New) A method of evaluating whiteness of light emitted from a light source, comprising the steps of:

providing a whiteness measurement apparatus;

calibrating the whiteness measurement apparatus using a standard illuminant;

using the whiteness measurement apparatus to output a whiteness value W for a light source other than the standard illuminant; wherein

calibrating the whiteness measurement apparatus comprises the apparatus computing a coefficient  $a$  by dividing -50 by C1, where C1 is a chroma value of the standard illuminant, and C1 is computed by the apparatus from spectrophotometer measurements of the standard illuminant using a method for calculating a chroma value defined by the CIE 1997 Interim Color Appearance Model; and

the output whiteness value W is computed using equation (1):

$$W = aC2 + b \dots (1)$$

where  $b=100$ , C2 is a chroma value of the light source, and C2 is computed by the apparatus from spectrophotometer measurements of the light source using the same method for calculating a chroma value as was used to calibrate the apparatus.